

AIR QUALITY PERMIT

Issued To: Schellinger Construction Co., Inc.
P.O. Box 39
Columbia Falls, MT 59912-0039

Permit #2624-15
Application Complete: 11/30/06
Preliminary Determination Issued: 01/08/07
Department Decision Issued:
Permit Final:
AFS #: 777-2624

An air quality permit, with conditions, is hereby granted to Schellinger Construction Co., Inc. (Schellinger), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Location

Schellinger operates a portable crushing/screening facility that may operate at various locations throughout Montana. Permit #2624-15 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* Addendum #15 applies to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On November 30, 2006, Schellinger submitted a complete application for a modification of Permit #2624-14. Schellinger requested the Department to update the permit to reflect the following: current emission factors; updated emissions inventory; current Department language regarding spray bar requirements; reduction of the size of the 1,200 kilowatt (kW) to 1,000 kW; maximize allowable production; and list additional pits for winter season operations. The Department updated Schellinger's permit as requested.

Section II: Conditions and Limitations

A. Emissions Limitations

1. All visible emissions from any Standards of Performance for New Stationary Sources (NSPS) affected crushers may not exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
2. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment used in conjunction with this facility, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
3. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other associated equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

4. Schellinger shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
5. Schellinger shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752).
6. Water shall be available and used, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
7. Schellinger shall not operate more than two crushers at any given time and the cumulative maximum rated design capacity of the crushers shall not exceed 600 tons per hour (TPH) (ARM 17.8.749).
8. Total combined crusher production from the facility shall be limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. Schellinger shall not operate more than two screens at any given time and the cumulative maximum rated design capacity of the screens shall not exceed 600 TPH (ARM 17.8.749).
10. Total combined screen production from the facility shall be limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).
11. Schellinger shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 1,000 kW and shall not exceed 4,800 hours during any rolling 12-month time period (ARM 17.8.1204(3) and ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Schellinger, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Schellinger shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO), as applicable.

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
2. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
2. Schellinger shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Schellinger as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
3. Schellinger shall supply the Department with annual production information for all emission points, as required by the Department in the annual emissions inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory and sources identified in Section I.A of the permit analysis. Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
4. Schellinger shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
5. Schellinger shall document, by month, the total combined crusher production from the facility. By the 25th day of each month, Schellinger shall total the combined crusher production during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted annually to the Department, along with the annual emission inventory (ARM 17.8.749).
6. Schellinger shall document, by month, the total combined screen production from the facility. By the 25th day of each month, Schellinger shall total the combined screen production during the previous 12 months to verify compliance with the limitation in Section II.A.10. A written report of the compliance verification shall be submitted annually to the Department, along with the annual emission inventory (ARM 17.8.749).
7. Schellinger shall document, by month, the hours of operation of the 1,000 kW diesel generator. By the 25th day of each month, Schellinger shall total the hours of operation of the diesel generator during the previous 12 months to verify compliance with the limitation in Section II.A.11. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

8. Schellinger shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.1204).

Section III: General Conditions

- A. Inspection - Schellinger shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Schellinger fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions, and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If the Board does not issue a stay, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Schellinger may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Schellinger shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

Permit Analysis
Schellinger Construction Co., Inc.
Permit Number 2624-15

I. Introduction/Process Description

A. Permitted Equipment

Schellinger Construction Co., Inc. (Schellinger) operates a portable crushing/screening facility consisting of two crushers (up to 600 tons per hour (TPH) combined capacity), two 3-deck screens (up to 600 TPH combined capacity), a diesel generator (up to 1,000 kilowatts (kW)), and associated equipment.

B. Process Description

Schellinger proposes to use this crushing/screening plant to crush and sort sand and gravel. For a typical operational setup, the raw materials are loaded into a hopper and conveyed to the crushing/screening plant. Materials are crushed by the crushers, screened and sorted by the screens, and stockpiled for sale and use, generally for construction operations.

C. Permit History

On March 20, 1990, Permit **#2624-00** was issued to Schellinger to operate a diesel generator, a screen, a 1976 Pioneer 50 VE portable duplex gravel crusher, and associated equipment. The jaw crusher was limited to a maximum production rate of 200 TPH, and the rolls crusher was limited to a maximum production rate of 200 TPH.

On March 17, 1994, Permit **#2624-01** with **Addendum 1** was issued to Schellinger to allow the crushing plant to operate at the NW $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Section 1, Township 30 North, Range 22 West, in Flathead County. The location was within the Whitefish particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area.

On April 13, 1994, Permit **#2624-02** with **Addendum 2** was issued to allow the crushing plant to operate at the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 31, Township 29 North, Range 21 West (NUPAC Pit) and at the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 22, Township 29 North, Range 21 West (A-1 Paving's Pit) in Flathead County during the winter months (October 1 through March 31). The NUPAC pit is approximately 0.6 kilometers (km) from the Kalispell PM₁₀ nonattainment area and A-1 Paving's pit is approximately 2.25 km from the Kalispell PM₁₀ nonattainment area.

On August 7, 1995, Schellinger requested that Permit #2624-02 be modified to allow the crushing plant to continue operation within 10 km of certain PM₁₀ nonattainment areas during the winter months (October 1 through March 31). The new conditions and reporting requirements were stated in **Addendum 3** of Permit **#2624-03**.

On August 25, 1996, Permit **#2624-04** with **Addendum 4** was issued to Schellinger, which modified Permit #2624-03 and allowed Schellinger to operate the crushing plant within 10 km of certain PM₁₀ nonattainment areas during the summer months, and to operate throughout the winter months (October 1996 through March 1997) within 10 km of the Thompson Falls and Kalispell PM₁₀ nonattainment areas. Also, Permit #2624-04 was updated to reflect the new emission factors used in the emission inventory. As a result of using the new emission factors, the operational limit of 8500 hours per year was removed.

On March 23, 1997, Permit **#2624-05** with **Addendum 5** was issued to Schellinger for the operation of the crushing plant in or within 10 km of certain PM₁₀ nonattainment areas. The permit allowed the operation of this plant in these areas through September 30, 1997.

On November 12, 1997, Schellinger requested that Permit #2624-05 be modified to allow the crushing plant to operate at the NE¼ of the NE¼ of Section 26, Township 29 North, Range 22 West in Flathead County until September 30, 1998, and in or within 10 km of any PM₁₀ nonattainment area from April 1, 1998, through September 30, 1998. It was determined that the conditions contained in Permit #2624-05 must be modified, per General Condition I of Permit #2624-05, and controls implemented to limit the impacts of the portable crusher's emissions on the nonattainment area. A SCREEN VIEW Model was completed and demonstrated no significant impacts on the nonattainment area for the operation of the crushing plant at the NE¼ of the NE¼ of Section 26, Township 29 North, Range 22 West in Flathead County. The new conditions and reporting requirements were stated in **Addendum 6** of Permit #2624-06. Permit #2624-06 replaced Permit #2624-05.

On December 19, 1998, Schellinger was issued Permit #2624-07 with **Addendum 7** to allow the facility to operate at seven different locations in or within 10 km of the Kalispell PM₁₀ nonattainment area during the winter months. In addition, Permit #2624-07 allowed operation in or within 10 km of the following PM₁₀ nonattainment areas from April 1, 1999, to September 30, 1999: Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.

On March 16, 1999, Schellinger was issued Permit #2624-08 with **Addendum 8** to allow the facility to operate at seven different locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the winter months (October 1, 1999, through March 31, 2000). In addition, Permit #2624-08 allowed operation in or within 10 km of the following PM₁₀ nonattainment areas from April 1, 2000, through September 30, 2000: Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte. SCREEN VIEW air dispersion modeling was conducted for the proposed operation in order to determine a production limit that would be protective of the nonattainment areas. Worst case modeling results were used to determine a production limit that would be protective of existing air quality in or within 10 km of the PM₁₀ nonattainment areas. Permit #2624-08 replaced Permit #2624-07 and Addendum 8 replaced Addendum 7.

On September 14, 2000, Schellinger was issued Permit #2624-09 with **Addendum 9** for a renewal of the addendum in Permit #2624-08 to allow the facility to continue operation at seven different locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the winter months (October 1, 2000, through March 31, 2001). In addition, Permit #2624-09 allowed operation in or within 10 km of the following PM₁₀ nonattainment areas from April 1, 2001, through September 30, 2001: Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte. SCREEN VIEW air dispersion modeling was conducted to determine a production limit that would protect the nonattainment areas. Worst-case modeling results were used to determine a production limit that would protect existing air quality in or within 10 km of the PM₁₀ nonattainment areas. Based on Schellinger's request, the Department of Environmental Quality (Department) determined that the modeling performed for Permit #2624-08 was still valid. The decisions in this permit were based on that modeling. Permit #2624-09 replaced Permit #2624-08 and Addendum 9 replaced Addendum 8.

On May 8, 2002, Schellinger was issued Permit #2624-10 with **Addendum 10** to replace a 1976 Pioneer duplex crusher (jaw and rolls) with a 1990 El-Jay cone crusher (maximum capacity 200 TPH), a 1998 Nordberg cone crusher (maximum capacity 300 TPH), a 1979 Pioneer cone crusher (maximum capacity 200 TPH), a 1994 diesel generator (1200 kW), and associated equipment. Additionally, Schellinger requested to renew their addendum to operate at seven different locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the winter months and in or within 10 km of certain PM₁₀ nonattainment areas during the summer months. SCREEN VIEW air dispersion modeling was conducted to determine a production limit that would be protective of the nonattainment areas. Worst-case

modeling results were used to determine a production limit that would protect existing air quality in or within 10 km of the nonattainment areas. The decisions in this permit are based on that modeling. Permit #2624-10 replaced Permit #2624-09 and Addendum 10 replaced Addendum 9.

On October 5, 2002, Schellinger was issued a permit to correctly identify the 1979 Pioneer crusher as a jaw and rolls crusher, not a cone crusher, as was originally reported. Additionally, Schellinger requested the addition of a 1998 Nordberg 3-deck screen, a 1990 EL-Jay 3-deck screen, and a 1979 Pioneer 4-deck screen to the list of permitted equipment. Furthermore, Schellinger requested to update their addendum, to incorporate the new equipment, and again be allowed to operate at seven different locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the winter months and in or within 10 km of certain PM₁₀ nonattainment areas during the summer months. Worst-case modeling results using SCREEN VIEW air dispersion modeling were used to determine a production limit that would protect existing air quality in or within 10 km of the PM₁₀ nonattainment areas. The decisions in the addendum were based on that modeling. Permit **#2624-11** replaced Permit #2624-10 and **Addendum 11** replaced Addendum 10.

On January 15, 2003, Schellinger submitted an administrative amendment request to remove the 1990 EL-Jay cone crusher (maximum capacity 200 TPH) and attached 3-deck (6'x16') screen (maximum capacity 200 TPH) and replace it with a crusher and attached screen with a capacity of up to 300 TPH. This equipment was added as an Administrative Amendment because the facility would be required to keep their production below the production limits previously established in Sections II.A.7 and II.A.8 of Permit #2624-11 and Sections III.A.6 and III.A.7 of Addendum 11, and would not result in an increase in emissions for the facility. Additionally, a request to update the addendum and include the NW¼ of the SE¼ and the NE¼ of the SW¼ of Section 36, Township 30 North, Range 21 West, in Flathead County, Montana as a site in the addendum was also requested. The facility would be allowed to operate at eight different locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the winter months and in or within 10 km of certain PM₁₀ nonattainment areas during the summer months. Worst-case SCREEN VIEW air dispersion modeling results were used to determine a production limit that would protect existing air quality in or within 10 km of the PM₁₀ nonattainment areas. Permit **#2624-12** replaced Permit #2624-11 and **Addendum 12** replaced Addendum 11.

On August 13, 2003, Schellinger submitted an administrative amendment request to remove the duplex crushing/screening unit consisting of a 1979 Pioneer jaw crusher (maximum capacity 200 tons per hour (TPH)) with an attached 1979 Pioneer rolls crusher (maximum capacity 200 TPH) and 1979 Pioneer 4-deck (5'x14') screen (maximum capacity 200 TPH), and associated equipment from Permit #2624-12. This permit action would not result in an increase in emissions for the facility, because the facility would be required to keep their production below the production limits previously established. Additionally, the addendum was also updated to reflect the current equipment for the facility. Also, the permit was updated to reflect the current permit language and rule references used by the Department. Permit **#2624-13** replaced Permit #2624-12 and **Addendum 13** replaced Addendum 12.

On February 2, 2004, the Department received a written request from Schellinger to add three additional sites to the list in the addendum of potential winter locations that Schellinger may use. The Department updated the addendum to reflect the request. In addition, the Department added language to the addendum that would allow Schellinger to propose additional winter sites without needing an administrative amendment to operate at the sites. Furthermore, the Department updated the rule citations within the permit and permit analysis to reflect the current air quality rules. Permit **#2624-14** replaced Permit #2624-13 and **Addendum 14** replaced Addendum 13.

D. Current Permit Action

On November 30, 2006, Schellinger submitted a complete application for a modification of Permit #2624-14. Schellinger requested the Department to update the permit to reflect the following: current emission factors; updated emissions inventory; current Department language regarding spray bar requirements; reduction of the size of the 1,200 kW to 1,000 kW; maximize allowable production; and list additional pits for winter season operations. The Department updated Schellinger's permit as requested. Permit **#2624-15** replaces Permit #2624-14 and **Addendum 15** replaces Addendum 14.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the permit analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Schellinger shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions

shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Schellinger must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Schellinger shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Schellinger, the crushing/screening equipment to be used with Permit #2624-15 is subject to NSPS requirements because of the size and date of manufacture of the crushing/screening equipment (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Schellinger shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Schellinger submitted the appropriate permit application fee for the

current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee.

The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, modify, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Schellinger has a PTE greater than 15 tons per year of total PM, oxides of nitrogen (NO_x), and carbon monoxide (CO); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Schellinger submitted a permit application for the current permit modification. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Schellinger submitted an affidavit of publication of a public notice for the September 26, 2006 issue of the *Daily Interlake*, a daily newspaper of general circulation, in Flathead County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Schellinger of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Schellinger, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's

PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant.
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule.
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2624-15 for Schellinger, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for all criteria pollutants.
 - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NESHAP standards.
 - e. This facility is subject to current NSPS (40 CFR 60, Subpart A and Subpart OOO) requirements.
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.
 - h. The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations, which limit that source's potential to emit.
 - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Based on these facts, the Department has determined that Schellinger will be a minor source of emissions as defined under Title V. Schellinger accepted federally enforceable conditions to stay below the Title V threshold. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Schellinger will be required to obtain an Operating Permit. The Department determined that the annual reporting

requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. Emission Inventory

Source	Tons/Year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Crushers (600 TPH combined maximum capacity)	3.15	1.42				
Screens (600 TPH combined maximum capacity)	5.78	1.94				
Material Transfer	3.68	1.23				
Pile Forming	42.05	19.71				
Bulk Loading	1.05	1.05				
Diesel Generator (up to 1,000 KW)	2.34	2.34	99.77	2.28	17.71	26.04
Haul Roads	12.68	3.60				
Total	70.73	30.68	99.77	2.28	17.71	26.04

Note: Limitations were placed on the diesel generator to keep NO_x emissions below the 100 tpy Title V threshold.

Up to 2 Crushers (up to 600 tons/hour total maximum capacity)

Maximum Process Rate: 600 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0012 lbs/ton * 600 ton/hr = 0.72 lb/hr
Daily Calculations: 0.72 lb/hr * 24 hr/day = 17.28 lb/day
Annual Calculations: 0.72 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 3.15 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.00054 lb/ton * 600 ton/hr = 0.324 lb/hr
Daily Calculations: 0.324 lb/hr * 24 hr/day = 7.78 lb/day
Annual Calculations: 0.324 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.42 ton/yr

Up to 2 Screens (up to 600 tons/hour total maximum capacity)

Process Rate: 600 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0022 lb/ton * 600 ton/hr = 1.32 lb/hr
Daily Calculations: 1.32 lb/hr * 24 hr/day = 31.68 lb/day
Annual Calculations: 1.32 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 5.78 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.00074 lb/ton * 600 ton/hr = 0.44 lb/hr
Daily Calculations: 0.44 lb/hr * 24 hr/day = 10.66 lb/day
Annual Calculations: 0.44 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.94 ton/yr

Diesel Generator

Generator Size = up to 1000 kW
1kW = 1.341 hp
1000 kW * 1.341 = 1341 hp

Hours of operation: 4800 hr/yr -- or -- 13.15 hr/day

PM Emissions

Emission Factor: 0.0007 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.0007 \text{ lb/hp-hr} = 0.94 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.0007 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 12.34 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.0007 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 2.34 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.0007 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.0007 \text{ lb/hp-hr} = 0.94 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.0007 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 12.34 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.0007 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 2.34 \text{ ton/yr}$

NOx Emissions:

Emission Factor: 0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.031 \text{ lb/hp-hr} = 41.57 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.031 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 546.66 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.031 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 99.77 \text{ ton/yr}$

VOC Emissions:

Emission Factor: 0.00071 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.00071 \text{ lb/hp-hr} = 0.95 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.00071 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 12.52 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.00071 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 2.28 \text{ ton/yr}$

CO Emissions:

Emission Factor: 0.0055 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.0055 \text{ lb/hp-hr} = 7.38 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.0055 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 97.05 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.0055 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 17.71 \text{ ton/yr}$

SOx Emissions:

Emission Factor: 0.00809 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: $1341 \text{ hp} * 0.00809 \text{ lb/hp-hr} = 10.85 \text{ lb/hr}$
Daily Calculations: $1341 \text{ hp} * 0.00809 \text{ lb/hp-hr} * 13.15 \text{ hr/day} = 142.67 \text{ lb/day}$
Annual Calculation: $1341 \text{ hp} * 0.00809 * 4800 \text{ hr/yr} * 0.0005 \text{ lb/ton} = 26.04 \text{ ton/yr}$

Material Transfer

Process Rate: 600 ton/hr
Number of Transfers 10 transfers
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.00014 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: $0.00014 \text{ lb/ton} * 600 \text{ ton/hr} * 10 = 0.84 \text{ lb/hr}$
Daily Calculations: $0.84 \text{ lb/hr} * 24 \text{ hr/day} = 20.16 \text{ lb/day}$
Annual Calculations: $0.84 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.68 \text{ ton/yr}$

PM₁₀ Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: $0.000046 \text{ lb/ton} * 600 \text{ ton/hr} * 10 = 0.28 \text{ lb/hr}$
Daily Calculations: $0.28 \text{ lb/hr} * 24 \text{ hr/day} = 6.62 \text{ lb/day}$
Annual Calculations: $0.28 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.23 \text{ ton/yr}$

Pile Forming

Process Rate: 600 ton/hr
Number of Piles 5 piles
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0032 lb/ton (AP-42, Section 13.2.4, 1/95)
Hourly Calculations: $0.0032 \text{ lb/ton} * 600 \text{ ton/hr} * 5 \text{ piles} = 9.60 \text{ lb/hr}$
Daily Calculations: $9.60 \text{ lb/hr} * 24 \text{ hr/day} = 230.40 \text{ lb/day}$

Annual Calculations: 9.60 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 42.05 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)
Hourly Calculations: 0.0015 lb/ton * 600 ton/hr * 5 piles = 4.5 lb/hr
Daily Calculations: 4.5 lb/hr * 24 hr/day = 108.0 lb/day
Annual Calculations: 4.5 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 19.71 ton/yr

Bulk Loading

Process Rate: 600 ton/hr
Number of Loads: 4 load
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0001 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0001 lb/ton * 600 ton/hr = 0.24 lb/hr
Daily Calculations: 0.24 lb/hr * 24 hr/day = 5.76 lb/day
Annual Calculations: 0.24 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.05 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.0001 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0001 lb/ton * 600 ton/hr = 0.24 lb/hr
Daily Calculations: 0.24 lb/hr * 24 hr/day = 5.76 lb/day
Annual Calculations: 0.24 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.05 ton/yr

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}
Assumption: Rated Load Capacity < 50 tons
Hours of Operation: 8760 hr/yr
24 hr/day
365 day/yr

PM Emissions:

Emission Factor: 13.90 lb/VMT
Calculations: 5.0 VMT/day * 13.90 lb/VMT = 69.50 lb/day
69.50 lb/day * 365 day/yr * 0.0005 ton/lb = 12.68 ton/yr

PM₁₀ Emissions:

Emission Factor: 3.95 lb/VMT
Calculations: 5 VMT/day * 3.95 lb/VMT = 19.75 lb/day
19.75 lb/day * 365 day/yr * 0.0005 ton/lb = 3.60 ton/yr

IV. BACT Analysis

A BACT determination is required for each new or altered source. Schellinger shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A. Area Source Fugitive Emissions and Crushing and Screening Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing and screening operation. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing and screening operation, and for emissions from the crushing and screening operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In

Deleted: XXX

Formatted: Tabs: 36 pt, Left

Deleted: ¶

Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 54 pt + Tab after: 72 pt + Indent at: 72 pt, Widow/Orphan control, Tabs: 36 pt, Left

Deleted: /

Formatted: Indent: Left: 54 pt, Tabs: 36 pt, Left

Formatted: Indent: Left: 72 pt, Tabs: 72 pt, Left + Not at 54 pt

Deleted: /

Deleted: /

Deleted: /

addition, water suppression has been required of recently permitted similar sources. Schellinger may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Schellinger shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Also, Schellinger shall not cause or authorize to be discharged into the atmosphere from any affected screens, conveyor transfers, or other NSPS-affected equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Schellinger shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

Deleted: -

Schellinger must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Schellinger is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Schellinger may also use chemical dust suppression, in order to maintain compliance with emission limitations in Section II of Permit #3870-00. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operation.

Formatted: Indent: Left: 18 pt, Hanging: 54 pt, Tabs: 72 pt, Left + Not at 54 pt

Deleted: .A

B. Diesel Generator

Due to the limited amount of emissions produced by the diesel generator/engine and the lack of readily available, cost effective add-on controls; add-on controls would be cost prohibitive. Therefore, the Department determined proper operation and maintenance with no add-on controls would constitute BACT for the diesel generator/engine.

Formatted: Indent: Left: 54 pt, Tabs: 36 pt, Left

Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 54 pt + Tab after: 72 pt + Indent at: 72 pt, Widow/Orphan control, Tabs: 36 pt, Left

The control options required for the proposed crushing and screening facility are comparable to other recently permitted similar sources, and are capable of achieving the appropriate emission standards.

Formatted: Indent: Left: 72 pt, Tabs: 36 pt, Left

Formatted: Indent: Left: 54 pt, Tabs: 36 pt, Left

Formatted: Tabs: 36 pt, Left

Deleted: /

V. Existing Air Quality

The conditions and limitations within Permit #2624-15 would protect air quality for the sites and the surrounding area. This permit will cover the operations while operating at various locations throughout Montana.

VI. Ambient Air Quality Impact Analysis

Permit #2624-15 will cover the operations of a portable crushing/screening plant to be located at various locations throughout Montana. Addendum 14 to permit #2624-15 sets conditions and limitations that allow for this portable crushing/screening plant to be located at various locations in or within 10 km of the Kalispell, Columbia Falls, and Whitefish PM₁₀ nonattainment areas during the summer months (April 1 through March 31) and in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1 through September 30). Based on the information provided, the Department believes that the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard. In addition, this source is portable and any air quality impacts will be minimal.

Addendum 14
Schellinger Construction Co., Inc.
Permit #2624-15

An addendum to air quality Permit #2624-15 is issued to Schellinger Construction Co., Inc. (Schellinger), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

Schellinger is permitted to operate a portable diesel generator (up to 1000 Kilowatt (kW)), two crushers (combined maximum capacity 600 tons per hour (TPH)), two (combined maximum capacity 600 TPH), and associated equipment. Schellinger will operate at various locations throughout Montana, including in or within 10 kilometers (km) of the following certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas: Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish.

II. Seasonal and Site Restrictions

Addendum 14 applies to the Schellinger facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) - The only locations in or within 10 km of a PM₁₀ nonattainment area where Schellinger may operate are:
1. NE¼ of the SW¼ of Section 23, Township 30 North, Range 21 West (A-1 Paving Hodgson Road Pit);
 2. NE¼ of the NE¼ of Section 26, Township 29 North, Range 22 West (Tutvedt Pit);
 3. NW¼ of the NW¼ of Section 31, Township 29 North, Range 21 West (NUPAC Pit);
 4. NW¼ of the NW¼ of Section 22, Township 29 North, Range 21 West (A-1 Paving Pit);
 5. N½ of Section 21, Township 30 North, Range 21 West (Carlson Pit);
 6. S½ of the SE¼ of Section 31, Township 31 North, Range 22 West (Peschel Pit);
 7. NE¼ and SE¼ of the NW ¼ of Section 9, Township 27 North, Range 21 West (Spoklie Pit);
 8. NW¼ of the SE¼ of Section 36, Township 30 North, Range 21 West (County Pit);
 9. NW¼ of the SE¼ of Section 36, Township 30 North, Range 21 West (Jellison Pit);
 10. SE¼ of the NW¼ of Section 11, Township 30 North, Range 20 West (Columbia Heights Pit);
 11. Section 17, Township 29, Range 22 West (Beasley Pit);
 12. NW¼ of Section 16, township 29 North, Range 22 West (Tutvedt Pit 2); and
 13. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) – Schellinger may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.
- C. Schellinger shall comply with the limitations and conditions contained in Addendum #14 to Permit #2624-15 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum #14 shall be valid until revoked or modified. The

Department reserves the authority to modify Addendum #14 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Conditions and Limitations

A. Operational Conditions and Limitations – **Winter Season (October 1 – March 31)**

1. Water spray bars must be available and operated, as necessary, on the crushers, screens, and all transfer points to maintain compliance with the opacity limitations in Sections III.A.2 and III.A.3 (ARM 17.8.749).
2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
4. Schellinger shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
5. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
6. The combined crusher production for the facility shall not exceed 7,890 tons during any rolling 24-hour time period (ARM 17.8.749).
7. The combined screen production for the facility shall not exceed 7,890 tons during any rolling 24-hour time period (ARM 17.8.749).
8. The operation of the diesel generator shall not exceed 13.15 hours of operation during any rolling 24-hour period (ARM 17.8.749).

B. Operational Conditions and Limitations – **Summer Season (April 1 – September 30)**

1. Water spray bars must be available and operated, as necessary, on the crushers, screens, and all transfer points to maintain compliance with the opacity limitations in Sections III.A.2 and III.A.3 (ARM 17.8.749).
2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Schellinger shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
4. Schellinger shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
5. Schellinger shall treat all unpaved portions of the access roads, parking lots, and general

plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

6. The combined crusher production for the facility shall not exceed 14,400 tons during any rolling 24-hour time period (ARM 17.8.749).
7. The combined screen production for the facility shall not exceed 14,400 tons during any rolling 24-hour time period (ARM 17.8.749).
8. The operation of the diesel generator shall not exceed 13.15 hours of operation during any rolling 24-hour period (ARM 17.8.749).

C. Operational Reporting Requirements

1. Schellinger shall provide the Department with written notification of job completion within 10 working days after job completion (ARM 17.8.749).
2. Schellinger shall provide the Department with written notice of relocation of the permitted equipment within 15 working days before the physical transfer of equipment (ARM 17.8.765).
3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emissions inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):
 - a. Tons of material crushed by each crusher at each site
 - b. Tons of material screened by each screen at each site
 - c. Tons of bulk material loaded at each site
 - d. Daily hours of operation at each site
 - e. Gallons of diesel used by the generator at each site
 - f. Fugitive dust information consisting of a listing of all plant vehicles, including the following for each vehicle type:
 - i. Number of vehicles
 - ii. Vehicle type
 - iii. Vehicle weight, loaded
 - iv. Vehicle weight, unloaded
 - v. Number of tires on vehicle
 - vi. Average trip length
 - vii. Number of trips per day per vehicle
 - viii. Average vehicle speed
 - ix. Area of activity
 - x. Vehicle fuel usage (gasoline and diesel) annual total
 - g. Fugitive dust control for haul roads and general plant area:
 - i. Hours of operation of water trucks
 - ii. Application schedule for chemical dust suppressant, if applicable
4. Schellinger shall document, by day, the combined total crushing production during the

winter season. Schellinger shall sum the combined total crushing production during the previous 24 hours to verify compliance with the limitation in Section III.A.6. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.749).

5. Schellinger shall document, by day, the combined total crushing production during the summer season. Schellinger shall sum the combined total crushing production during the previous 24 hours to verify compliance with the limitation in Section III.B.6. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.749).
6. Schellinger shall document, by day, the combined total screening production during the winter season. Schellinger shall sum the combined total screening production during the previous 24 hours to verify compliance with the limitation in Section III.A.7. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.749).
7. Schellinger shall document, by day, the combined total screening production during the summer season. Schellinger shall sum the combined total screening production during the previous 24 hours to verify compliance with the limitation in Section III.B.7. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.749).
8. Schellinger shall document, by day, the hours of operation of the diesel generator. Schellinger shall total the hours of operation of the diesel generator during the previous 24 hours to verify compliance with the limitation in Section III.A.8 and Section III.B.8. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emissions inventory (ARM 17.8.749).

Addendum 14 Analysis
Schellinger Construction Co., Inc.
Permit #2624-15

I. Permitted Equipment

Schellinger Construction Co., Inc. (Schellinger), operates a portable diesel generator (up to 1,000 Kilowatt (kW)), two crushers (total maximum capacity up to 600 tons per hour (TPH)), two screens (total maximum capacity up to 600 TPH), and associated equipment.

II. Process Description

Schellinger proposes to use this crushing/screening plant to crush and sort sand and gravel. For a typical operational setup, the raw materials are initially sent through the feeder and processed (through up to 2 crushers, up to 2 screens, and associated equipment), stockpiled, and sold, generally for construction operations.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Schellinger demonstrated compliance with all applicable rules and standards as required for permit issuance.
- B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. ARM 17.8.765 Transfer of Permit. An air quality permit may be transferred from one location to another if:
 - 1. Written notice of Intent to Transfer location and proof of public notice are sent to the Department;
 - 2. The source will operate in the new location for a period of less than 1 year; and
 - 3. The source will not have any significant impact on any nonattainment area or any Class I area.

Schellinger must submit proof of compliance with the transfer and public notice requirements when

they transfer to any of the locations covered by this addendum, and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and limitations of Addendum 14 to Permit #2624-15 will prevent Schellinger from having a significant impact on certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

IV. Emission Inventory (Addendum 14 to Permit #2624-15)

Source	Lbs/day					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Crushers (600 TPH combined maximum capacity)	9.47	4.26				
Screens (600 TPH combined maximum capacity)	17.36	5.84				
Material Transfer	11.05	3.63				
Pile Forming	75.75	35.51				
Bulk Loading	1.10	0.36				
Diesel Generator (up to 1000 KW)	12.34	12.34	546.66	12.52	97.05	142.67
Haul Roads	69.50	19.75				
Total	196.57	81.69	546.66	12.52	97.05	142.67

Emission Inventory for Winter Season

Up to 2 Crushers (up to 600 tons/hour total maximum capacity)

Maximum Process Rate: 600 ton/hr
Hours of operation: 4800 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0012 lbs/ton * 600 ton/hr = 0.72 lb/hr
Daily Calculations: 0.72 lb/hr * 13.15 hr/day = 9.47 lb/day
Annual Calculations: 0.72 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 1.73 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.00054 lb/ton * 600 ton/hr = 0.324 lb/hr
Daily Calculations: 0.324 lb/hr * 13.15 hr/day = 4.26 lb/day
Annual Calculations: 0.324 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 0.78 ton/yr

Up to 2 Screens (up to 600 tons/hour total maximum capacity)

Process Rate: 600 ton/hr
Hours of operation: 4800 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0022 lb/ton * 600 ton/hr = 1.32 lb/hr
Daily Calculations: 1.32 lb/hr * 13.15 hr/day = 17.36 lb/day
Annual Calculations: 1.32 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 3.17 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.00074 lb/ton * 600 ton/hr = 0.44 lb/hr
Daily Calculations: 0.44 lb/hr * 13.15 hr/day = 5.84 lb/day
Annual Calculations: 0.44 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 1.07 ton/yr

Diesel Generator

Generator Size = up to 1000 kW
1kW = 1.341 hp
1000 kW * 1.341 = 1341 hp

Hours of operation: 4800 hr/yr -- or -- 13.15 hr/day

PM Emissions

Emission Factor:	0.0007 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.0007 lb/hp-hr = 0.94 lb/hr
Daily Calculations:	1341 hp * 0.0007 lb/hp-hr * 13.15 hr/day = 12.34 lb/day
Annual Calculation:	1341 hp * 0.0007 * 4800 hr/yr * 0.0005 lb/ton = 2.34 ton/yr

PM₁₀ Emissions:

Emission Factor:	0.0007 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.0007 lb/hp-hr = 0.94 lb/hr
Daily Calculations:	1341 hp * 0.0007 lb/hp-hr * 13.15 hr/day = 12.34 lb/day
Annual Calculation:	1341 hp * 0.0007 * 4800 hr/yr * 0.0005 lb/ton = 2.34 ton/yr

NOx Emissions:

Emission Factor:	0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.031 lb/hp-hr = 41.57 lb/hr
Daily Calculations:	1341 hp * 0.031 lb/hp-hr * 13.15 hr/day = 546.66 lb/day
Annual Calculation:	1341 hp * 0.031 * 4800hr/yr * 0.0005 lb/ton = 99.77 ton/yr

VOC Emissions:

Emission Factor:	0.00071 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.00071 lb/hp-hr = 0.95 lb/hr
Daily Calculations:	1341 hp * 0.00071 lb/hp-hr * 13.15 hr/day = 12.52 lb/day
Annual Calculation:	1341 hp * 0.00071 * 4800 hr/yr * 0.0005 lb/ton = 2.28 ton/yr

CO Emissions:

Emission Factor:	0.0055 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.0055 lb/hp-hr = 7.38 lb/hr
Daily Calculations:	1341 hp * 0.0055 lb/hp-hr * 13.15 hr/day = 97.05 lb/day
Annual Calculation:	1341 hp * 0.0055 * 4800hr/yr * 0.0005 lb/ton = 17.71 ton/yr

SOx Emissions:

Emission Factor:	0.00809 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations:	1341 hp * 0.00809 lb/hp-hr = 10.85 lb/hr
Daily Calculations:	1341 hp * 0.00809 lb/hp-hr * 13.15 hr/day = 142.67 lb/day
Annual Calculation:	1341 hp * 0.00809 * 4800 hr/yr * 0.0005 lb/ton = 26.04 ton/yr

Material Transfer

Process Rate:	600 ton/hr
Number of Transfers	10 transfers
Hours of operation:	4800 hr/yr

PM Emissions:

Emission Factor:	0.00014 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations:	0.00014 lb/ton * 600 ton/hr * 10= 0.84 lb/hr
Daily Calculations:	0.84 lb/hr * 13.15 hr/day = 20.16 lb/day
Annual Calculations:	0.84 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 3.68 ton/yr

PM₁₀ Emissions:

Emission Factor:	0.000046 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations:	0.000046 lb/ton * 600 ton/hr * 10= 0.28 lb/hr
Daily Calculations:	0.28 lb/hr * 13.15 hr/day = 6.62 lb/day
Annual Calculations:	0.28 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 1.23 ton/yr

Pile Forming

Process Rate:	600 ton/hr
Number of Piles	3 piles
Hours of operation:	4800 hr/yr

PM Emissions:

Emission Factor:	0.0032 lb/ton (AP-42, Section 13.2.4, 1/95)
Hourly Calculations:	0.0032 lb/ton * 600 ton/hr * 3 piles= 5.76 lb/hr
Daily Calculations:	5.76 lb/hr * 13.15 hr/day = 75.75 lb/day
Annual Calculations:	5.76 lb/hr * 4800 hr/yr * 0.0005 ton/lb = 13.82 ton/yr

PM₁₀ Emissions:

Emission Factor:	0.0015 lb/ton	(AP-42, Section 13.2.4, 1/95)
Hourly Calculations:	0.0015 lb/ton * 600 ton/hr * 3 piles =	2.70 lb/hr
Daily Calculations:	2.7 lb/hr * 13.15 hr/day =	35.51 lb/day
Annual Calculations:	2.7 lb/hr * 4800 hr/yr * 0.0005 ton/lb =	6.48 ton/yr

Truck Unloading

Process Rate:	600 ton/hr
Number of Loads	1 load
Hours of operation:	4800 hr/yr

PM Emissions:

Emission Factor:	0.00014 lb/ton	(AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations:	0.0001 lb/ton * 600 ton/hr =	0.08 lb/hr
Daily Calculations:	0.08 lb/hr * 13.15 hr/day =	1.10 lb/day
Annual Calculations:	0.08 lb/hr * 4800 hr/yr * 0.0005 ton/lb =	0.20 ton/yr

PM₁₀ Emissions:

Emission Factor:	0.000046 lb/ton	(AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations:	0.000046 lb/ton * 600 ton/hr =	0.03 lb/hr
Daily Calculations:	0.03 lb/hr * 13.15 hr/day =	0.36 lb/day
Annual Calculations:	0.03 lb/hr * 4800 hr/yr * 0.0005 ton/lb =	0.07 ton/yr

Haul Roads

Vehicle miles traveled:	5 VMT/day	{Estimated}
Assumption:	Rated Load Capacity < 50 tons	
Hours of Operation:	8760 hr/yr	
	24 hr/day	
	365 day/yr	

PM Emissions:

Emission Factor:	13.90 lb/VMT	
Calculations:	5.0 VMT/day * 13.90 lb/VMT =	69.50 lb/day
	69.50 lb/day * 365 day/yr * 0.0005 ton/lb =	12.68 ton/yr

PM₁₀ Emissions:

Emission Factor:	3.95 lb/VMT	
Calculations:	5 VMT/day * 3.95 lb/VMT =	19.75 lb/day
	19.75 lb/day * 365 day/yr * 0.0005 ton/lb =	3.60 ton/yr

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM₁₀. Due to exceedances of the national standards of PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM₁₀ emissions.

Addendum 14 to Permit #2624-15 is for a portable crushing/screening plant to locate at sites in or within 10 km of certain PM₁₀ nonattainment areas during the summer season (April 1 through September 30). Summer seasons may include locations in or within 10 kilometers of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas. Winter season (October 1 through March 31) operations may include only the locations listed in Section II.A of Addendum 14.

VI. Air Quality Impacts

Schellinger applied for an air quality permit to operate a portable crushing/screening plant to be located at various locations throughout Montana. Permit #2624-15 and Addendum 14 will cover the Schellinger crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas considered tribal lands. Based on the information provided, the Department believes that the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Schellinger Construction Co., Inc.
P.O. Box 39
Columbia Falls, MT 59912

Permit Number: #2624-15

Preliminary Determination Issued: January 8, 2007

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Schellinger submitted a request to update Permit #2624-15 to reflect the current emission factors and Department guidelines which would allow increased production limits in the permit and the addendum. Schellinger also requested to list two additional sites in the addendum for the winter season. Permit #2624-15 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. Addendum 19 to the Schellinger facility applies while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* On November 30, 2006, Schellinger submitted a complete application for a modification of Permit #2624-14. Schellinger requested the Department to update the permit to reflect the following: current emission factors; updated emissions inventory; current Department language regarding spray bar requirements; reduction of the size of the 1,200 kW to 1,000 kW; maximize allowable production; and list additional pits for winter season operations.
3. *Objectives of Project:* The object of the project would be to increase production during summertime operations to produce business and revenue for the company through the increased sale and use of aggregate products. The issuance of Permit #2624-15 would allow Schellinger to operate the permitted equipment at various locations throughout Montana.
4. *Additional Project Site Information:* In many cases, this crushing/screening operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Schellinger demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #2624-15.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I.	Historical and Archaeological Sites			X			yes
J.	Cumulative and Secondary Impacts			X			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same areas in which the crushing/screening operations occur. However, the crushing/screening operations are portable and the impacts would be limited by the short-term nature of the operation. Furthermore, since Schellinger would generally locate at a pre-existing pit, additional impacts to the terrestrial and aquatic life and habitats would be minor as a result of the crushing/screening operations.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the crushing/screening facility would operate, there would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While additional deposition of pollutants would occur, the Department believes that any impacts from deposition of pollutants would be minor. As described in 7.F. of the EA, due to the conditions placed in Permit #2923-19 and the size and nature of the facility, the maximum impacts from the air emissions from this facility would be minor.

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor surface disturbance to the proposed operational site, since only relatively small amounts of water would be required to be used for pollution control. Therefore, at most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required and deposition of air pollutants on surrounding water bodies would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on geology and soil quality, stability, and moisture because the crushing/screening facility would generally locate within a previously disturbed open-cut pit. As explained in Section 7.F. of this EA, the deposition of air pollutants on soils would be minor because operations would be seasonal and intermittent, relatively small amounts of pollution would be generated, and air pollutant dispersion would greatly minimize the impacts from the pollution on the surrounding soils.

Additional pollution deposition and water used to control emissions from the increased production would result in only minor disturbance to the soil. The soils in the affected area would be impacted by the crushing/screening operations due to the additional emissions and use of the crushing/screening facility. However, given the relatively small size and portable, temporary nature of the operation, any impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

Minor, if any impacts would occur on vegetative cover, quality, and quantity because the facility would operate at a site where vegetation has been previously removed/disturbed. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (see Section 8.F); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (see Section 8.B) and the associated soil disturbance from the application of water and any associated runoff would be minimal (see Section 8.C), corresponding vegetative impacts would be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise in the area. Permit #2624-15 would include conditions to limit the emissions (including visible emissions) from the plant. Also, because the crushing/screening operation would be portable, would operate on an intermittent and seasonal basis, and would locate within an existing open-cut pit, any visual and noise impacts would be minor and short-lived. Overall, the impacts to the aesthetics of the surrounding area would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small, would operate on an intermittent and temporary basis, and would locate in a previously disturbed open-cut pit. Permit #2624-15 would include conditions limiting the facility's opacity and crushing/screening production from the plant, as well as conditions requiring water spray bars to control air pollution. In addition, water spray bars and reasonable precautions would be required to control emissions from haul roads, access roads, parking lots, and the general work area. Permit #2624-15 would also limit total emissions from the crushing/screening facility and any additional Schellinger equipment operated at the site to 250 tons/year or less, excluding fugitive emissions. Further, the Department determined that the crushing/screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE is below the major source threshold level of 100 tons per year for any regulated pollutant.

Pollutant deposition from the facility would be minimal and the pollutants emitted from the facility

would be widely dispersed (from factors such as wind speed and wind direction). The corresponding impacts of pollutants from deposition on surrounding soils, vegetation, water resources, human populations, and terrestrial and aquatic life would also be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Due to the minor amount of increased emissions from the current permit action, the fact that the facility operates in existing pits, would have limited production and have seasonal and intermittent use, the Department determined that it would be unlikely that the proposed project would impact any species of special concern and that any potential impacts would be minor.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility and the slight increase in production, the crushing/screening operations would only require small quantities of water and energy for proper operation. Only small quantities of water would be required to be used for dust suppression to control emissions being generated at the site. Energy requirements would be small because the facility would be a crushing/screening operation that would be powered by one industrial diesel generator. The facility would use a limited amount of fuel (a non-renewable resource), would have limited production, and would have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source would be a small industrial emissions source, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed areas of construction/operation. Search results concluded that there were no previously recorded historical or archaeological resources within the area proposed for initial operations. Further, according to past correspondence from SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to an area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening equipment because the operational site has already been disturbed and because no previously recorded historical/archaeological resources have been identified at the proposed operational site location.

J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate relatively minor amounts of PM, PM₁₀, NO_x, VOC, CO, and SO_x emissions. Noise generated by equipment operations would be minimal because the equipment would operate in an actively mined and bermed open-cut pit that would be separated from any residential areas. Emissions generated from facility operations would result in only minor deposition on surrounding resources, and the facility would have intermittent and seasonal operations. Additionally, this facility, in combination with other Schellinger equipment operated at the same site, would not be permitted to exceed 250 tons per year of non-fugitive emissions. Therefore, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D.	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G.	Quantity and Distribution of Employment				X		yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be operating at an area designated and currently used for aggregate mining, would be separated from the general population, and would only have temporary and intermittent operations. Additionally, the equipment would be expected to operate according to the conditions placed in Permit #2624-15. Thus, no impacts upon social structures or mores would result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed increase in emissions at the crushing/screening operation because the facility would operate at sites that have been used for crushing/screening of aggregate and is separated from the general population. Additionally, the facility would be a portable/temporary source with seasonal and intermittent operations. Therefore, the predominant use of the surrounding areas would not change as a result of this project and the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source) and would have seasonal and intermittent operations. The facility would require the use of only a few existing employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the facility would be a relatively small industrial source of aggregate production and air emissions. Also, the facility would locate in an existing permitted open-cut pit. Additional industrial resources are not expected as the result of this facility. However, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts on surrounding vegetation (as described in Section 8.D of this EA). Pollution control would be utilized for equipment operations and production limits would be established to minimize emissions.

E. Human Health

Permit #2624-15 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits. Furthermore, dispersion of pollutants would result in minimal impacts upon the surrounding area of operations and pollutants would be widely dispersed (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the facility would be a crushing/screening operation that would operate within an existing industrial open-cut pit site. The amount of noise generated from the crushing/screening operations would be minimal, because of the small size of the facility. Also, the facility would operate on a seasonal and intermittent basis at this existing pit site, and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The portable crushing/screening operation is relatively small, would have seasonal and intermittent operations, and would only require a few employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility, since Schellinger would be expected to utilize existing employees for this temporary project. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing/screening operation is small and would only require a few existing employees for proper operation. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility, which would have only intermittent and seasonal operations and would be a portable source. Therefore, the crushing/screening facility would not disrupt the normal population distribution.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits, maintaining compliance with the appropriate permits, and for providing corresponding government services (such as traffic control and roadway compaction testing) to maintain roads. Demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor increase in the industrial activity in this or any other area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Schellinger would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified, including the proposed initial site location. Permit #2624-15 would contain production and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. However, the Department is not aware of any related locally adopted environmental plans or goals to further regulate facility operations. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any impacts upon locally adopted environmental plans and goals from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source would be a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source would be relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Schellinger, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result on the local economy.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Julie Merkel

Date: January 4, 2007